

ABSTRACT OF THE DISCLOSURE

A calculation circuit for the division of a fixed-point input signal comprising a
 sequence of digital data values having a width of n bits by an adjustable division factor 2^a
 for the purpose of generating a divided fixed-point output signal, having a signal input (2)
 for applying the data value sequence of the fixed-point input signal, a first addition circuit
 (6), which adds the digital data value present at the signal input (2) to a data value buffer-
 stored in a register (33) to form a digital first summation data value having a width of
 $\max(n, a+1) + 1$ bits, a shift circuit (11) which shifts the first summation data value
 present by a data bits toward the right, with the result that the $\max(n, a+1) - a + 1$ more
 significant data bits of the first summation data value are output at an output of the shift
 circuit (11), a logic circuit (16), which, as a function of the sign of the first summation
 data value, logically ANDs the a less significant data bits of the first summation data
 value with a logic combination data value, or logically Ors them with the inverted logical
 combination data value, and outputs them to the register (33) for buffer-storage of the
 logically combined data value (d_{v1}, d_{v2}), a second addition circuit (37), which, as a
 function of the sign of the first summation data value adds the data value output by the
 shift circuit (11) to a value one for eliminating the DC signal component to form a second
 summation data value, and having a signal output for outputting the sequence of the
 second summation data values as divided fixed-point output signal.